

Hybrid Power Management (GRC) Program Develops Lightweight Hybrid Electric Vehicle



JME, Inc.

TECHNOLOGY

Hybrid Power Management (HPM) is the art of combining diverse power devices in an optimal configuration for space and terrestrial applications. The ultracapacitor has an extremely long life, excellent low temperature characteristics, and is rugged, reliable, and maintenance free. This is ideal for hybrid electric vehicles.

COMMERCIAL APPLICATION

- ◆ Applications include power generation, transportation, biotechnology, and space power systems
- ◆ Capacitors have been used to replace batteries in an electric bike

SOCIAL / ECONOMIC BENEFIT

- ◆ HPM has the potential to significantly alleviate global energy concerns, improve the environment, and stimulate the economy.
- ◆ The capacitor has an indefinite life, compared to current batteries which only last about 1 year
- ◆ Recharging the capacitor takes only minutes, a fraction of the traditional 4 to 8 hour charge time of a battery



Hybrid electric vehicles can be greatly improved through the application of Hybrid Power Management (HPM).

NASA APPLICATIONS

- ◆ HPM provides reliable, long life energy storage systems essential for aeronautic and deep space missions. HPM also provides safe energy storage for drop tower research.

NASA Contact: Dennis J. Eichenberg
Company Contact: Dr. John Miller